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Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

west virginia department of environmental protection

### **G70-D GENERAL PERMIT ENGINEERING EVALUATION**

PREVENTION AND CONTROL OF AIR POLLUTION IN REGARD TO THE CONSTRUCTION, MODIFICATION, RELOCATION, ADMINISTRATIVE UPDATE AND OPERATION OF NATURAL GAS PRODUCTION FACILITIES LOCATED AT THE WELL SITE

LOCATED AT THE WELL SITE				
APPLICATION NO.: G70-D249	FACILITY ID: <b>017-00167</b>			
<ul><li></li></ul>	☐ CLASS I ADMINISTRATIVE UPDATE ☐ CLASS II ADMINISTRATIVE UPDATE			
	D INFORMATION			
Name of Applicant (as registered with the WV Secompany				
Federal Employer ID No. (FEIN): 25-0724685				
Applicant's Mailing Address: 625 Liberty Avenu	ue, Suite 1700			
City: Pittsburgh State: PA	ZIP Code: 15222			
Facility Name: OXF-155 pad				
Operating Site Physical Address: Near Summers If none available, list road, city or town and zip of facility.				
City: Summers Zip Code: 26	County: Doddridge			
Latitude & Longitude Coordinates (NAD83, Deci Latitude: 39.21338 Longitude: -80.80996	mal Degrees to 5 digits):			
SIC Code: 1311 NAICS Code: 211111	Date Application Received: April 7, 2017			
Fee Amount: \$1,500.00	Date Fee Received: May 9, 2017			
Applicant Ad Date: April 14, 2017	Newspaper: The Doddridge Independent			
Date Application Complete: May 11, 2017	Due Date of Final Action: June 26, 2017			
Engineer Assigned: Roy F. Kees, P.E.				
Description of Permitting Action: EQT Production General Permit (G70-D) application to the West V (WVDEP) for the construction and operation of mad, OXF-155, located in Doddridge County, West	Virginia Department of Environmental Protection ew equipment at a new natural gas production well			

#### PROCESS DESCRIPTION

The following process description was taken from Registration Application G70-D249:

This G70-D Permit Application involves the construction of a new natural gas production wellpad (OXF-155). The wellpad will consist of six (6) wells, each with the same basic operation. The following equipment will be installed at the facility: six (6) storage tanks, one (1) low pressure separator with associated heater and vapor recovery units (VRUs), six (6) line heaters, and one (1) sand separator tank.

The incoming gas/liquid stream from the underground wells will pass through a sand separator, where sand, water, and residual solids are displaced and transferred to the sand separator tank (S014). The gas stream will then pass through the line heaters (S007-S012) to raise/maintain temperature. The stream will then pass through the high pressure (3 phase) separators, which will separate gas (natural gas from the separator is sent to the sales line) from liquids (condensate and produced water). The produced fluids stream will then pass through the low pressure separator, where it is heated (S013) to volatilize (flash off) lighter hydrocarbons and separate condensate and produced water in the liquid stream. The flash gas from the condensate stream is recovered by the Vapor Recovery Unit, which utilizes a natural gas-fired engine (S015 and S016) driven compressor to raise the pressure of the flash gas and route it back into the natural gas pipeline. The condensate is then transferred to the produced fluid storage vessels (S001-S006).

Emissions from the storage vessels are controlled by two enclosed combustors (C001, C002). Once the tanks are filled, the contents are loaded into trucks for transport. EQT utilizes vapor balancing in the condensate truck loading operations, which means the vapors displaced by the filling of tanker trucks (S017) are routed back into the battery of tanks and ultimately to the combustors.

#### SITE INSPECTION

Site Inspection Date: May 9, 2017

Site Inspection Conducted By: James Roberston

Results of Site Inspection: The proposed location for this well pad is in a remote area on top of a hill. The closest residence appears to be several thousand feet away. This site is located in an area off of the South Fork of the Hughes River with very heavy natural gas activity. In my opinion this site is suitable for a General Permit.

Did Applicant meet Siting Requirements? Yes

If applicable, was siting criteria waiver submitted? N/A

Directions to Facility: From WV DEP, head west on Pleasant Valley Road toward Ruskin Drive. Turn right onto Kingmont road. Turn left to merge onto I-79S. Take exit 119 to merge onto US-50 W toward Clarksburg/Bridgeport. Turn left onto Old U.S 50E/Sunnyside road. Turn left onto Co Rte 21/Oxford Road. Turn left onto S Form of Hughes River. Finally, turn left onto CO Rte 23/2. OXF-155 would be on your left.

### ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology (e.g. ProMax, GlyCalc, mfg. data, AP-42, etc.)
S001-S006	(6) Produced Fluid Storage Tanks	ProMax & Tanks
S007-S012	(6) Line Heaters	AP-42
S013	(1) Separator Heater	AP-42
S014	Sand Separator Storage Tank	ProMax & Tanks
S015	VRU Caterpillar Engine	Manufacturer Data / AP-42
S016	VRU EDI Engine	Manufacturer Data / AP-42
S017	Liquid Loading	AP-42
C001-C002	(2) Enclosed Combustors	AP-42
Fugitives	Fugitive Emissions	AP-42

The total facility PTE for the facility (excluding fugitive emissions) is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)	PTE Change for Modification (tons/year)
Nitrogen Oxides	28.57	N/A
Carbon Monoxide	27.12	N/A
Volatile Organic Compounds	50.84	N/A
Particulate Matter	3.48	N/A
Particulate Matter-10/2.5	3.48	N/A
Sulfur Dioxide	0.12	N/A
Formaldehyde	0.38	N/A
Total HAPs	6.79	N/A
Carbon Dioxide Equivalent	25,030.58	N/A

Maximum detailed controlled point source emissions were calculated by the applicant and checked for accuracy by the writer and are summarized in the table on the next page.

AF	APPLICANT: EQT Production Company	ANT:	EQT Pro	duction (	Company	FA	FACILITY NAME: OXF-155 Wellpad	Y NA	ME: o	XF-155	Wellpad			G70.	G70-D249	
ssion Point	Z	NO <sub>x</sub>	)	00		voc	Š	SO <sub>2</sub>	PN	PM <sub>10</sub>	PN	PM <sub>2.5</sub>	Mei	Methane	GHG	GHG (CO,e)
#QI	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tbv	lb/hr	hv	lh/hr	, at
S001-S006, S017	3	1		-	2.14	2.24	-		ŀ	-	1		0.29	1.26	7.17	31.41
S007-S012	06.0	3.84	0.72	3.24	90.0	0.24	0.01	0.02	90.0	0:30	90.0	0.30	0.00	0.06	1082.16	4739.94
S013	0.22	96.0	0.18	0.81	0.01	0.05	00.00	0.01	0.02	0.07	0.02	0.07	0.01	0.02	270.27	1183.79
S014	1	1	ŀ	1	0.19	0.83	!	-	1		-	ı	0.02	0.00	0.50	2.18
S015	2.14	9.39	2.23	9.78	0.17	0.74	0.00	0.74	90.0	0.28	90.0	0.28	0.01	0.03	391.72	1715 75
8016	0.24	1.06	0.49	2.12	0.18	0.81	00.00	00.00	0.01	90.0	0.01	0.06	0.00	0.01	83.85	36778
8017	1	1	!	1	37.13	9.65	1	1	ŀ	1	1	1	1	:	3	1
C001-C002	3.04	13.31	2.55	11.17	TNK/LD	TNK/LD	0.02	0.08	0.23	1.01	0.23	1.01	0.28	1.26	3634.37	15918.56
Fugitives	ŀ	1	1	1	:	36.30	1	1	1	1.76	1	0.18	1	44.12	;	1103.11
TOTAL	6.52	28.57	6.19	27.12	39.88	50.84	0.03	0.12	0.39	3.48	0.39	1.90	0.34	45.61	5462.89	25030.58

APPLICANT: EQT Production Company	VT: EQ	T Produc	tion Com	pany	FA	CILI	FACILITY NAME: OXF-155 Wellpad	ME:	XF-155	Wellpad			G70-D <sub>249</sub>	)249
Emission Doint ID#	Forma	Formaldehyde	Ben	Benzene	Tolu	Toluene	Ethylbo	Ethylbenzene	Xyle	Xylenes	Hex	Hexane	Total	Total HAPs
Limbolou I Olini 10#	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	1b/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tby
S001-S006, S017	1	1	:	1	1	1	:	1	1	ŀ	1		0.22	0.25
S007-S012		ŀ		1	1	ŀ	-	-	The state of the s	;			0.02	90.0
S013		1	1	-	ı	:	1		-	:	1	1	0.00	0.02
S014	0.00	0.00	0.00	0.00	00.0	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
S015	0.07	0.31	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.49
S016	0.01	90'0	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.10
S017	1		0.02	0.01	0.03	0.01	0.00	0.00	0.01	0.00	3.61	0.94	3.67	0.96
C001-C002	1	1	ľ	ı.		-		-	1		1	ı	TNK/LD	TNK/LD
Fugitives	ŀ	1	1		-	1	I		-		:	4.70	00.00	4.88
TOTAL	60.0	0.38	0.03	0.04	0.03	0.02	0.00	00.00	0.01	0.01	3.85	5.98	4.05	6.79

#### REGULATORY APPLICABILITY

#### 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units.

45CSR2 states that any fuel burning unit that has a heat input under ten (10) MMBTU/hr is exempt from Sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. If the individual heat input of all of the proposed fuel burning units are below 10 MMBTU/hr, these units are exempt from the aforementioned sections of 45CSR2. However, the registrant would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
S007-S012	(6) Line Heaters	1.54 Each
S013	(1) Separator Heater	2.31

#### 45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

45CSR6 prohibits open burning, establishes emission limitations for particulate matter, and establishes opacity requirements. Sources subject to 45CSR6 include completion combustion devices, enclosed combustion devices, and flares.

The facility-wide requirements of the general permit include the open burning limitations §§45-6-3.1 and 3.2.

All completion combustion devices, enclosed combustion devices, and flares are subject to the particulate matter weight emission standard set forth in §45-6-4.1; the opacity requirements in §45-6-4-3 and 4-4; the visible emission standard in §45-6-4.5; the odor standard in §45-6-4.6; and, the testing standard in §45-6-7.1 and 7.2.

Enclosed combustion control devices and flares that are used to comply with emission standards of NSPS, Subpart OOOO are subject to design, operational, performance, recordkeeping and reporting requirements of the NSPS regulation that meet or exceed the requirements of 45CSR6.

Emission Unit ID#	Maximum Design Heat Input (MDHI) (MMBTU/hr)	Subject to Weight Emission Standard?	Control Efficiency Claimed by Registrant	Provide Justification how 45CSR6 is met.
C001	11.66	⊠ Yes □ No	98	Assuming 20,000 BTU/lb, the allowable PM emissions are 1.58 lb/hr. Using AP-42, the PM emissions were calculated to be 0.09 lb/hr.
C002	19.22	⊠ Yes □ No	98	Assuming 20,000 BTU/lb, the allowable PM emissions are 2.61 lb/hr. Using AP-42, the PM emissions were calculated to be 0.14 lb/hr.

#### 45CSR10 (To Prevent and Control Air Pollution from the Emission of Sulfur Oxides)

45 CSR10 establishes emission limitations for  $SO_2$  emissions which are discharged from stacks of fuel burning units. A "fuel burning unit" means and includes any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Sources that meet the definition of "Fuel Burning Units" per 45 CSR10-2.8 include GPUs, inline heaters, heater treaters, and glycol dehydration unit reboilers.

Fuel burning units less than 10 MMBtu/hr are exempt. The sulfur dioxide emission standard set forth in 45CSR10 is generally less stringent than the potential emissions from a fuel burning unit for natural gas. The SO<sub>2</sub> emissions from a fuel burning unit will be listed in the G70-D permit registration at the discretion of the permit engineer on a case-by-case basis. Issues such as non-attainment designation, fuel use, and amount of sulfur dioxide emissions will be factors used in this determination. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Fuel burning units burning natural gas are exempt from Section 8 (Monitoring, Recording and Reporting) as well as interpretive rule 10A. The G70-D eligibility requirements exclude from eligibility any fuel burning unit that does not use natural gas as the fuel; therefore, there are no permit conditions for 45CSR10.

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
S007-S012	(6) Line Heaters	1.54 Each
S013	(1) Separator Heater	2.31

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that the applicant is defined as a "stationary source" under 45CSR13 Section 2.24.b. Stationary source means, for the purpose of this rule, any building, structure, facility, installation, or emission unit or combination thereof, excluding any emission unit which meets or falls below the criteria delineated in Table 45-13B which: (a) is subject to any substantive requirement of an emission control rule promulgated by the Secretary; (b) discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant; (c) discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis; (d) discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater; or, (e) an owner or operator voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so. 45CSR13 has an original effective date of June 1, 1974.

The applicant meets the definition of a stationary source because (check all that apply):

$\boxtimes$	Subject to a substantive requirement of an emission control rule promulgated by the Secretary.
$\boxtimes$	Discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or
	has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant.
	Discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of
	hazardous air pollutants considered on an aggregated basis.
	Discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown
	in Table 45-13A or greater.
	Voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though
	not otherwise required to do so.

General Permit G70-D Registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13. General Permit G70-D sets forth reasonable conditions that enable eligible registrants to establish enforceable permit limits.

Section 5 of 45CSR13 provides the permit application and reporting requirements for construction of and modifications to stationary sources. No person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, relocate and operate the stationary source as required in the rule or any other applicable rule promulgated by the Secretary.

If applicable, the applicant meets the following (check all that apply):
<ul> <li>☐ Construction</li> <li>☐ Modification</li> <li>☐ Class I Administrative Update (45CSR13 Section 4.2.a)</li> <li>☐ Class II Administrative Update (45CSR13 Section 4.2.b)</li> </ul>
45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)
45CSR16 applies to all registrants that are subject to any of the NSPS requirements described in more detail in the Federal Regulations section. Applicable requirements of NSPS, Subparts IIII, JJJJ and OOOO are included in General Permit G70-D.
The applicant is subject to:  40CFR60 Subpart IIII  40CFR60 Subpart JJJJ  40CFR60 Subpart OOOO  40CFR60 Subpart OOOOa
AFOGDAA (AL O III BK

#### 45CSR22 (Air Quality Management Fee Program)

45CSR22 is the program to collect fees for certificates to operate and for permits to construct or modify sources of air pollution. 45CSR22 applies to all registrants. The general permit fee of \$500 is defined in 45CSR13. In addition to the application fee, all applicants subject to NSPS requirements or NESHAP requirements shall pay additional fees of \$1,000 and \$2,500, respectively.

Registrants are also required to obtain and have in effect a valid certificate to operate in accordance with 45CSR22 §4.1. The fee group for General Permit G70-D is 9M (all other sources) with an annual operating fee of \$200.

### 40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)

Subpart IIII sets forth non-methane hydrocarbon (NMHC), hydrocarbon (HC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary compression ignition (CI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13. The following CI engines are subject to this section:

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart IIII is met.
N/A				☐ Met Emission Standard ☐ Certified Engine

## 40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary spark ignition (SI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart JJJJ is met.
S016	Engine Distributors, Inc CSG-637	110	08/2017	☐ Met Emission Standard ☑ Certified Engine

40CFR60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published amendments to the Subpart on September 23, 2013 and June 3, 2016.

40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015. The affected sources which commence construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015 are subject to the applicable provisions of this Subpart as described below:

Gas well affected facilities are included in Ge	eneral Permit G70-D	in Section 5.0.
Are there any applicable gas well affected faci	lities? Yes	⊠ No
If Yes, list.		

 API Number	Date of Flowback	Date of Well Completion	Green Completion and/or Combustion Device	Subject to OOOO?
N/A				

Centrifugal compressor affected facilities are not subject. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

**Reciprocating compressor affected facilities are not subject.** Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

	atrollers affected facilities are is applicable pneumatic contr		teral Permit G70-D, Section 10.0.  facilities? Yes No			
For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants), each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.						
Determination Are there any	of storage vessel affected faciliapplicable storage vessel af	<i>ity status is incli</i> fected facilitie	ed in General Permit G70-D, Section 7.0.  Suded in Section 6.0 of General Permit G70-D.  es? Yes No  fficiencies used to avoid 40CFR60 Subpart			
If Yes, list.						
Emission Unit ID#	Storage Vessel Description	SV Size (gal)	Provide Justification how 40CFR60 Subpart OOOO is met.			
N/A						
VOC emissions 1 storage vessel a remain an affect 40CFR60, Su Production, T Reconstruction	equal to or greater than 6 tpy a s and by April 15, 2014, or 30 of ffected facility that subsequentle ted facility under this subpart.  bpart OOOOa (Standards Transmission and Distribution Commenced after Septe	s determined accidays after startuply has its potention of Performan tion for which mber 18, 2015	•			
			NSPS) and air toxics rules for the oil and gas to the Subpart on September 23, 2013 and June			
40CFR60 Subpart OOOOa establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO <sub>2</sub> ) emissions from affected facilities that commence construction, modification or reconstruction after September 18, 2015. The effective date of this rule is August 2, 2016.						
methane) and		ng with fugitive	he form of a limitation on emissions of ve emissions monitoring as required in ions in §60.5398a.			
	ted facilities are included i applicable gas well affected					

API Number	Date of Flowback	Date of Well Completion	Green Completion and/or Combustion Device	Subject to OOOOa?
047-017-06755	TBD	TBD	Green	Yes
047-017-06756	TBD	TBD	Green	Yes
047-017-06757	TBD	TBD	Green	Yes
047-017-06758	TBD	TBD	Green	Yes
047-017-06759	TBD	TBD	Green	Yes
047-017-06768	TBD	TBD	Green	Yes

Centrifugal compressor affected facilities are not subject. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

**Reciprocating compressor affected facilities are not subject.** Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

site and servicing more than one well site, is not an affected facility under this subpart.
Pneumatic controllers affected facilities are included in General Permit G70-D, Section 10.0.  Are there any applicable pneumatic controller affected facilities? Yes No
Each pneumatic controller affected facility not located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.
Requirements for storage vessel affected facilities are included in General Permit G70-D, Section 7.0.  Are there any applicable storage vessel affected facilities? Yes No  If No, list any emission reduction devices and control efficiencies used to avoid 40CFR60 Subpart OOOO.  (2) Enclosed Combustors, C001-C002, 11.66 & 19.22 MMBtu/hr, respectively, 98% Control
If Yes, list.

Emission Unit ID#	Storage Vessel Description	SV Size (gal)	Provide Justification how 40CFR60 Subpart OOOO is met.
N/A			

Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section.

Fugitive Emissions	GHG and V	OC Standards	affected	facilities (	are incl	uded in	General .	Permit	G70-
D in Section 12.0.									

Did the registrant commence construction, modification, or reconstruction of the well site after September 18, 2015 and is subject to §60.5397a? Xes No

For the purposes of §60.5397a, a "modification" to a well site occurs when a new well is drilled at an existing well site, a well at an existing well site is hydraulically fractured, or a well at an existing well site is hydraulically refractured.

affected facility status of a separate tank battery surface site has no effect on the affected facility status of a well site that only contains one or more wellheads. Requirements for pneumatic pump affected facilities are included in General Permit G70-D, Section 16.0. Are there any applicable pneumatic pump affected facilities at the well site? Yes If Yes, list. Pneumatic Pump Description (Make, Model) N/A Each pneumatic pump affected facility at the well site, which is a single natural gas-driven diaphragm pump. A single natural gas-driven diaphragm pump that is in operation less than 90 days per calendar year is not an affected facility under this subpart as well as the required records are kept. 40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) This Subpart applies to owners and operators of each triethylene glycol (TEG) dehydration unit that are located at oil and natural gas production facilities. Only areas source requirements are included in General Permit G70-D, as defined in §63.761. For area source applicability, the affected source includes each trietheylene glycol (TEG) dehydration unit located at a facility that meets the criteria specified in §63.760(a). Glycol dehydration unit(s) are included in General Permit G70-D, Section 15.0. Are there any TEG dehydration unit(s) at this facility? Yes No. Are the TEG dehydration unit(s) located within an Urbanized Area (UA) or Urban Cluster (UC)? Yes No Are the glycol dehydration unit(s) exempt from 40CFR63 Section 764(d)? Yes No If Yes, answer the following questions: The actual annual average flowrate of natural gas to the glycol dehydration unit(s) is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in §63.772(b)(1) of this Subpart. Yes The actual average emissions of benzene from the glycol dehydration unit process vent(s) to the atmosphere are less than 0.90 megagram per year (1 ton per year), as determined by the procedures

A well site that only contains one or more wellheads is not an affected facility under this subpart. The

# 40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

specified in §63.772(b)(2) of this Subpart. Yes

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This Subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. This section reflects EPA's final amendments to 40 CFR part 63, Subpart ZZZZ that were issued on January 15, 2013 and published in the Federal Register on January 30, 2013.

No

WVDEP DAQ has delegation of the area source air toxics provisions of this Subpart requiring Generally Achievable Control Technology (GACT). The provisions of this Subpart have been included in this general permit under Section 13.0.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	New or Existing under 40CFR63 Subpart ZZZZ?	Provide Justification how 40CFR63 Subpart ZZZZ is met.
S015	Caterpillar G3408	405	02/2000	Existing	§63.6603(a), Table 2d
S016	Engine Distributors, Inc CSG-637	110	08/2017	New	JJJJ Certified

Are there any engines that fall in the window of being new under 40CFR60 Subpart ZZZZ but manufactured before the applicability date in 40CFR60 Subpart JJJJ? $\square$ Yes $\square$ No
If so, list the engines: N/A
SOURCE AGGREGATION DETERMINATION
"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.
Is there equipment and/or activities used for onshore oil and natural gas production that are located on the same site, or on sites that share equipment and are within ¼ mile of each other?  Yes No
Is this equipment and/or activities under "common control"?  Yes No
Do these facilities share the same two (2) digit SIC code?  Yes No
Final Source Aggregation Decision.  Source not aggregated with any other source.
Source aggregated with another source. List Company/Facility Name:

#### RECOMMENDATION TO DIRECTOR

The information provided in the permit application, including all supplemental information received, indicates the applicant meets all the requirements of applicable regulations and the applicant has shown they meet the eligibility requirements of General Permit G70-D. Therefore, impact on the surrounding area should be minimized and it is recommended that the facility should be granted registration under General Permit G70-D.

Permit Engineer Signature:	
Name and Title: Roy F. Kees, P.E Engineer, NSR Permitting	
Date: May 11, 2017	